

Clasping coneflower

Dracopis amplexicaulis (Vahl) Cass

Plant Symbol = DRAM

Common Names: Clasping-leaf coneflower, coneflower (Diggs et. al, 1999)

Scientific Names: (Synonym) *Rudbeckia amplexicaulis* Vahl. (Diggs et. al, 1999)

Description

General: Clasping coneflower is a native, warm season, annual forb in the Asteraceae family (Missouri Botanical Garden, 2019). Clasping coneflower grows 12 to 28 inches (30 to 71 cm) tall. It arises from a solitary stem which branches out about half way up the plant (Fig.1). The alternately arranged, oblong, glaucous leaves are 1.75 to 4 inches (4 to 10 cm) long. The leaves, at their base, wrap around the stems (Fig.1). This distinctive leaf characteristic is the origin of the species name derived from two Latin words; *amplexus* meaning ‘encircling’ and *caulis* meaning ‘stem’. Clasping coneflower blooms in late spring and early summer. The yellow ray flowers or “petals” are similar in appearance to black-eyed Susan (*Rudbeckia hirta*) and droop as the flowers mature. The flowerhead is up to two inches in diameter with a black center cone 0.5 to 1.25 inches (1 to 3 cm) high. (Ajilvsigi, 2003). The seeds are small, approximately 5/64” long (2 mm), elliptical in shape, with a wrinkled appearance (USDA NRCS, 2019) (Fig.2).

Distribution: Clasping coneflower is the only member of the *Dracopis* genus in North America (Diggs et al., 1999). It is found in the southeastern United States from Georgia to Texas and north into Missouri and Kansas (Missouri Botanical Garden, 2019). For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Clasping coneflower occurs in prairies, swales and flood plains and is found along roadsides and streams (Ajilvsigi, 2003; Missouri Botanical Garden, 2019).

Adaptation

Clasping coneflower prefers sites with full sun and moist soils but not poorly drained soils (Missouri Botanical Garden, 2019). This forb tolerates various soil types including acid or calcareous based sandy or clay loams (Ladybird Johnson Wildflower Center, 2019).

Uses

Clasping coneflower is an attractive plant for native gardening and wildflower meadows because of low maintenance requirements, showy flowers, and abundant self-seeding (Missouri Botanical Garden, 2019; Ladybird Johnson Wildflower



Figure 1. Clasping coneflower in bloom. Photo: East Texas Plant Materials Center, Nacogdoches, TX



Figure 2. Clasping coneflower seeds. Photo: Steve Hurst, ARS, hosted by the USDA-NRCS PLANTS Database.

Center, 2019). Foraging honeybees (*Apis* sp.) use the Asteraceae plant family for pollen and nectar sources (Jones and Bryant, 2014). Native bees and butterflies used clasping coneflower as a nectar source (Adamson et al., 2015).

Ethnobotany

Cherokee Native Americans used clasping coneflower juice for earaches and leaves to make a tonic and diuretic tea (Ladybird Johnson Wildflower Center, 2013).

Status

Threatened or Endangered: Clasping coneflower is not listed as threatened or endangered (US Fish and Wildlife Service, 2019).

Wetland Indicator: Wetland Indicator by region: (USDA NRCS, 2019)

Region	Indicator	Region	Indicator
Great Plains	FAC ^{1/}	Midwest	FACU ^{2/}
Eastern Mountains and Piedmont	FAC	Northcentral and Northeast	FACU
Atlantic and Gulf Coastal Plains	FAC	Arid West	FACW ^{3/}
Western Mountains, Valleys, and Coast	FAC		

1/=Facultative -occurs in both wetlands and non-wetlands, 2/=Facultative upland-usually occurs in non-wetlands, but may occur in wetlands, 3/= usually occur in wetlands, but may occur in non-wetlands.

Weedy or Invasive:

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use.

Please consult the PLANTS Web site (<http://plants.usda.gov/>) and your state’s Department of Natural Resources for this plant’s current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Planting Guidelines

Broadcast seeding is the preferred method for planting clasping coneflower. Prepare a weed free seedbed using light tillage, herbicide applications, or close mowing. Lightly disk or harrow to loosen the soil surface then roll or cultipack prior to seeding. Broadcast seed at a rate of 4 to 5 lb pure live seed (PLS)/acre in mid to late August or September (Grabowski, 2001). Seed should be placed close to the soil surface then rolled or cultipacked after seeding.

Management

Clip or mow spent flowers to control self-seeding and/or encourage additional blooming (Missouri Botanical Garden, 2019). Clasping coneflower is a prolific reseeder, but eventually declines without soil disturbance. Disk the site every two to three years to control perennial weeds and promote clasping coneflower germination (Burgess et al., 2010).

Pests and Potential Problems

Clasping coneflower is susceptible to powdery mildew (*Erysiphe* sp.) (Nieland and Finley, 2009) and may form colonies and shade out accompanying vegetation (Ajilvsgi, 2003).

Environmental Concerns

Clasping coneflower is considered a desirable plant within its native range and has no known effects on the environment.

Control

Clasping coneflower may be controlled by mechanical means such as mowing or applying a broad-spectrum herbicide. Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Control measures appear in this document only to provide specific information.

Seed and Plant Production

Prepare a weed free seedbed using tillage and/or herbicide application. Prior to planting, the seedbed must be firmed and accumulated moisture for improved establishment success. Broadcast seed at a rate of 4 PLS/acre during August or September (Grabowski, 2001). Mix the seed with a carrier agent such as cat litter or coarse sand to improve seed distribution and help prevent planting at too high a rate. After seeding, cultipack or roll the planting site to ensure good seed-to-soil contact. Clasping coneflower seedlings emerge in fall and over winter as small plants and begin rapid growth the following spring (Grabowski, 2001). In spring, apply 15 to 30 lb/ac. of nitrogen to aid plant growth and seed production.

Clasping coneflower seed ripens indeterminately in mid-summer. If the seed is harvested too soon, it will be held tightly in the seed head and not release during harvest. Hammermill the harvested material to break up the seed heads and separate the seeds for further cleaning. For optimum yields, harvest seed soon after the seed heads become brown and woolly in appearance but before shattering (Fig.3). Use a combine equipped with a slow speed fan to harvest the stand, then air dry and scalp the harvested material to expedite cleaning. Clean the harvested material with a seed cleaner equipped with air adjustments and separation screens to remove chaff and unfilled seed. Suggested cleaner screen settings are 1/16 round and 1/18 round for top screens and 6 x 36 wire mesh screen for the bottom screen to remove fine material. Cleaned seed yields for clasping coneflower range from 80 to 120 lb/acre (Grabowski, 2005). Seed purity varied from 69% to 98% and germination from 14% to 83% for harvests at the USDA NRCS Jamie L. Whitten Plant Materials Center (Grabowski, 2001). There are approximately 950,000 seeds per pound. The seeds appear to have no dormancy and remain viable up to five years under controlled storage conditions of 55°F and 45% relative humidity (Grabowski, 2001).



Figure 3. Mature coneflower seed heads are dark brown with a woolly or fuzzy appearance.

Cultivars, Improved, and Selected Materials (and area of origin)

Clasping coneflower seed is commercially available. Purchase seed based on local climate, resistance to local pests, and intended use. Consult with your local land grant university, local extension or local USDA NRCS office for recommendations for your area.

Literature Cited

- Adamson, N., B. Borders, J. Cruz, S. Jordan, K. Gill, J. Hopwood, E. Lee-Mader, and M. Vaughan. 2015. Pollinator plants southeast region. The Xerces Society for Invertebrate Conservation. Portland, OR.
- Ajilvsgi, G. 2003. Wildflowers of Texas. Shearer Publishing. Fredericksburg, TX.
- Burgess, L., T. Moss, J. Pomerlee, and J. Allison. 2010. Fact sheet-guidelines for fall wildflower planting. Jamie L. Whitten Plant Materials Center. Coffeeville, MS.
- Diggs, G.M., B.L. Lipscomb and R.J. O’Kennon. 1999. Shinner and Mahler’s illustrated flora of north central Texas. Botanical Research Institute of Texas, Ft. Worth, TX.
- Grabowski, J.M. 2001. Native plant network propagation protocol database: protocol information *Dracopis amplexicaulis* (Vahl.) Cass. Plants; Natural Resources Conservation Service – Coffeeville/Jamie L. Whitten Plant Materials Center, Coffeeville, Mississippi. In: Native Plant Network. Accessed online 12 March 2019 at: <http://www.nativeplantnetwork.org> Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.
- Grabowski, J.M. 2005. Native wildflower seed production techniques in Mississippi. Native Plants Journal. Univ. Of Wisconsin Press. Vol. 6(1): pp. 72-75.
- Jones, G. and V. Bryant. 2014. Pollen studies of east Texas honey. Palynology. 38(2): 242-258.
- Lady Bird Johnson Wildflower Center. 2019. Native Plant Database. Accessed online 3/12/2019: http://www.wildflower.org/plants/result.php?id_plant=DRAM .
- Missouri Botanical Garden. 2019. Plant Finder. Accessed online 12 March 2019 at: <http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=b277>
- Nieland, L. and W. Finley. 2009. Lone star wildflowers – a guide to Texas flowering plants. Texas Tech Univ. Press. Lubbock, TX.

US Fish and Wildlife Service. 2019. Endangered species database. Accessed online 12 March 2019 at: <https://www.fws.gov/angered/> US Fish and Wildlife Service.

USDA NRCS. 2019. Plant profile for *Dracopis amplexicaulis*. The PLANTS Database (<http://plants.usda.gov>, 12 March 2019). National Plant Data Team, Greensboro, NC 27401-4901 USA.

Citation

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